Pawan Wagh

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EDUCATION

Arizona State University, *Tempe, USA*   **Jan 2021 - Present**
M.S. in Computer Science   **GPA - 3.78/4**
- **Coursework** - Database Management System Implementation, Information Assurance and Security, Foundations of Algorithms.
- **Graduate Service Assistant** - Developed application for Lidar control and point cloud visualization using C++.
- **Developer -** Working as Backend Developer at University Technology Office on Node.js, AWS lambda and DynamoDB.

Pune Institute of Computer Technology (PICT), *Pune, India*   **July 2013 - June 2017**
B.E. in Computer Engineering   **GPA - 8.55/10**
- **Coursework** - Data Structures, Principles of Modern Compiler Design, Computer Networks, Cloud Computing, Operating Systems and Design, High Performance Computing, Object Oriented Programming, Design and Analysis of Algorithms.

SKILLS

Programming Languages	C++, C, Java, Python, Go, Shell Scripting
Databases	MongoDB, SQL
Frameworks	Play, Android SDK, Flask, Node.js
Operating Systems\Tools	Linux, Windows, Visual Studio, VMware vSphere, Maven, Docker, Git, Perforce, JIRA
Others	AWS, Debugging, Design Patterns, Cloud Services, Object oriented programming, REST APIs Problem Solving, Leadership

WORK EXPERIENCE

Software Engineer 2 - *Quick Heal Technologies, Pune, India*   **July 2019 - Oct 2020**
- Worked in a team of EndPoint Security Server backend and tools development.
- Optimized Service pack delivery mechanism which reduced storage used on AWS by around **8000** on premise server installations and effectively decreased cost per release by **20%**.
- Developed features including policy settings, improved firewall reports by propagating changes from client to server data contracts. Slashed deployment time by developing tools for automating tasks.
- Engineered a plugin and its backend server to monitor mail contents in outlook 365.
- Fixed crashes in product by analyzing crash dumps and resolved customer issues in the production environment.
- Mentored three new software engineers, created technical designs for features and performed code reviews.

Programmer - *Ubisoft Entertainment, Pune, India*   **July 2017 - July 2019**
- Contributed to tools, engine and gameplay for PlayStation 4 and Xbox One on Far Cry 3 CE.
- Implemented platform specific features, achievement system, input system for the game with **2M+ downloads**.
- Fixed compilation for retail configuration of referenced libraries and products which resulted in performance gain of **30%**.
- Led development for the camera system, prototyped camera designs and mentored two junior engineers.
- Upgraded the entire cinematic pipeline for Prince of Persia SOT and developed a tool for scene setup.
- Wrote scripts to clean more than **60%** unreferenced data in sqlite based large data files.
- Collaborated with the build team and Automated region wise build for generation by using Jenkins.

PROJECTS

User preference sensitive dbms on top of minibase (Java, Minibase)
- Implemented skyline computation operator using B+ tree indexes and pruned around **80%** records before computation.
- Created memory management mechanism to limit the amount of memory used by skyline operator.
- Developed clustered B+ tree index structures for minibase and extended minibase to handle float data types.

File activity monitor (C, WDM, Minifilter)
- Wrote a Minifilter driver to monitor file activities(read, write, delete) using the windows driver model.
- Created a user space application to communicate directory paths to kernel space minifilter driver.

Quality of Experience\Quality of Service mapping in Software-defined networks (Java, Play, MongoDB)
- Designed architecture for the project and wrote an algorithm for calculating quality of experience.
- Developed Play based controller application to adjust path weights to avoid congestion in network using mininet and MongoDB.

Data integrity and Deduplication checking for cloud platforms (Python, OpenStack)
- Deployed private cloud using OpenStack framework and coded SHA1 hashing algorithm in python.
- Built Client-Server Application to demonstrate integrity and deduplication checking.

ZangOut (Android, Kii, Google APIs)
- Developed an android application to make students comfortable with the new locality listing out local businesses and services.
- Created feature to add shops and list, integrated google auth and google places APIs with application.

ACHIEVEMENTS AND LEADERSHIP ACTIVITIES

- Led **team of size 8** for CSE 543 Information Assurance and Security in Spring 2021.
- Spot Award at Quick Heal for optimising service pack delivery mechanism.
- Received Big Bounty Hunter award at Ubisoft Pune for fixing maximum number of issues.